Opening Statement of Chairman Tom Davis
Government Reform Committee Hearing
"Climate Change Technology Research:
Do We Need a 'Manhattan Project' for the Environment?"
September 21, 2006

Good morning, and welcome to today's hearing on climate change technology. As we sit here today, the debate over climate change science continues, but this Committee – as well as the Administration and many others in government – already have recognized the important facts: that global mean temperature has increased over the past century, and that carbon dioxide in the atmosphere has contributed in some way to this warming.

With that in mind, our Committee seeks to move away from debating science to finding solutions. The purpose of today's hearing is to learn about the federal government's climate change research and development programs – specifically those dedicated to exploratory or 'innovative' technology. We also are going to discuss the best ways to steer these initiatives.

Right now, the Administration spends nearly \$3 billion on climate change technology research. Ostensibly, this research falls under the

1

umbrella of the President's Climate Change Technology Program (CTTP). That characterization of the CCTP, however, is misleading, because the CCTP has no budgetary authority. The billions of dollars that "fund CCTP" actually are dispersed directly to federal agencies without CCTP approval. In fact, to date, the CCTP has only received \$1.5 million in program support to supplement the creation of its Strategic Plan – which outlines the current research and future priorities of the program.

Without direct funding, CCTP does not employ full-time staff, and both Director Stephen Eule and Deputy Director Robert Marlay hold other positions within the Department of Energy. Currently, CCTP employs neither administrative nor analytical staff; it shares personnel with other offices on an as-needed basis.

Additionally, thus far, the federal government has yet to engage in any exploratory or 'innovative' technology research on climate change. Under the current funding structure, only near- and mid-term technology research programs receive R&D dollars. Climate solutions that lie outside of existing technology, such as geo-engineering and artificial photosynthesis, remain unaddressed.

Although CCTP is capable of commenting on technology-focused projects conducted across 13 federal agencies under the program, in its current state, CCTP simply does not have the authority to allocate funds for climate technology projects, begging the questions: (1) How well are we coordinating climate change technology research? and (2) Because of the present configuration of federal climate-change technology research, is it necessary to create a central, authorized body to command exploratory research – *an ARPA for climate change*?

The Defense Advanced Projects Agency (DARPA) was created to turn innovative technology into military capabilities. The agency is highly regarded for its work on the Internet, high-speed microelectronics, stealth and satellite technologies, unmanned vehicles and new materials, all of which produced not only military advancement but commercial benefits as well.

Unlike the CCTP, DARPA can segregate itself somewhat from its governing body (the Pentagon) and remain a small and flexible agency capable of quickly exploiting emerging technologies and adapting to

immediate military circumstances. Conversely, CCTP remains under the strict direction of the Cabinet-level Committee on Climate Change Science and Technology Integration (CCSTI), reducing the likelihood it will support novel concepts in climate technology research. Given its strict structure and limited authority, would the CCTP be the appropriate body to potentially manage a free-thinking and innovative exploratory technology agency?

To date, the under-funded and administratively barren Climate

Change Technology Program has yet to sufficiently coordinate and influence
the technology research initiatives conducted by the multiple federal
agencies under its charge, let alone manage potential new exploratory
technology research programs, such as a Climate Change Advanced
Research Projects Agency, or CCARPA.

Is it time to say "CCARPA Diem", and seize the opportunity to take technology research to the next level by bringing CCTP to the forefront of the U.S. climate change agenda? Or, will the full initiation of CCTP prove sufficient to guide climate change technology research into the future? These are the questions we hope to begin resolving in today.

The Committee has invited several highly qualified individuals to address these uncertainties. We will be hearing from Stephen Eule, Director of CCTP, on the status of climate change technology in the United States and on his role in overseeing climate change technology, and potential budgetary or organizational obstacles to the full implementation of a centralized climate technology program. We also will hear from GAO on the ambiguity of the appropriations to agencies with regard to climate change and the need for more clear disclosure of the nature of climate change research and development funding.

Also, we will explore the merits and challenges of creating a federal climate change exploratory technology program and will hear from experts on DARPA about the applicability of instituting a CCARPA for exploratory technology research and development.

Global climate change is one of the most serious environmental concerns of the 21st Century. This Committee is taking an important step by discussing how the federal government can better arm itself with technology to address this worldwide problem. I would like to thank all of our witnesses for their invaluable insights into this issue.